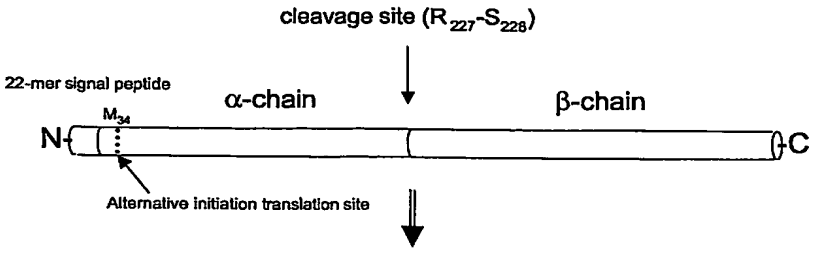
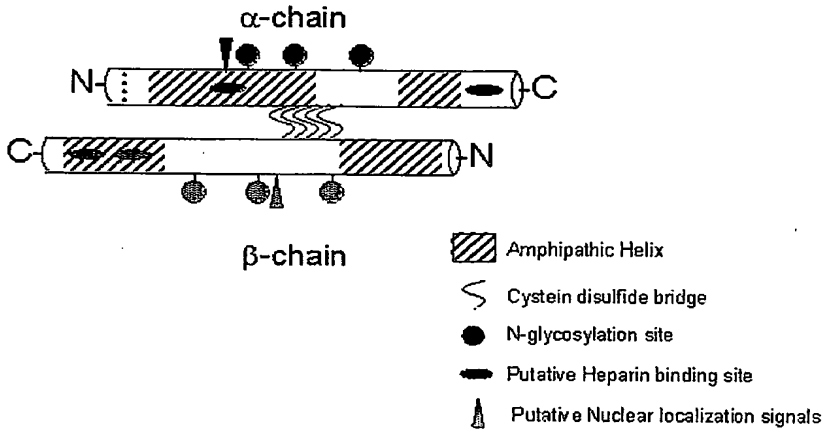
A



B



C

```
MMKTLLLFVG LLLTWESGQV LGDQTVSDNE LQEMSNQGSK YVNKEIQNAV NGVKQIKTLI
EKTNEERKTL LSNLEEAKKK KEDALNETRE SETKLKELPG VCNETMMALW EECKPCLKQT
CMKFYARVCR SGSGLVGRQL EEFLNQSSPF YFWMNGDRID SLLENDRQQT HMLDVMQDHF
SRASSIIDEL FQDRFFTREP QDTYHYLPFS LPHRRPHFFF PKSRIVRSLM PFSPYEPLNF
HAMFQPFLEM IHEAQQAMDI HFHSPAFQHP PTEFIREGDD DRTVCREIRH NSTGCLRMKD
QCDKCREILS VDCSTNNPSQ AKLRRELDES LQVAERLTRK YNELLKSYQW KMLNTSSLLE
QLNEQFNWVS RLANLTQGED QYYLRVTTVA SHTSDSDVPS GVTEVVVKLF DSDPITVTVP
VEVSRKNPKF METVAEKALQ EYRKKHREE
```

Fig. 1

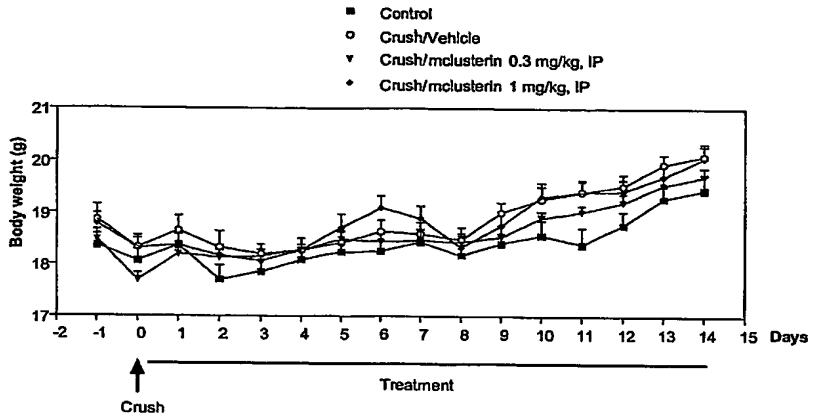

Control
Crush/Vehicle
Crush/mclusterin 0.3 mg/kg, IP
Crush/mclusterin 1 mg/kg, IP
Body weight (g)
21
20
19
18
17
-2 -1 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 Days
Crush
Treatment

Fig. 2

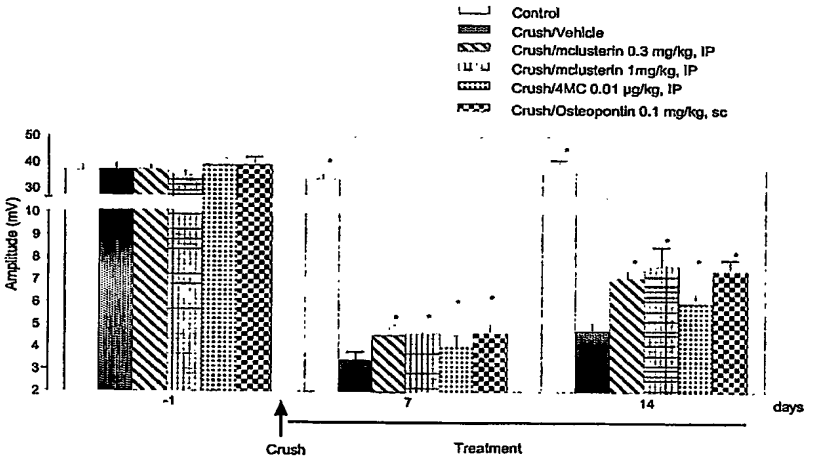

Control
Crush/Vehicle
Crush/mclusterin 0.3 mg/kg, IP
Crush/mclusterin 1mg/kg, IP
Crush/4MC 0.01 µg/kg, IP
Crush/Osteopontin 0.1 mg/kg, sc
Amplitude (mV)
50
40
30
10
9
8
7
6
5
4
3
2
-1
7
14
days
Crush
Treatment

Fig. 3

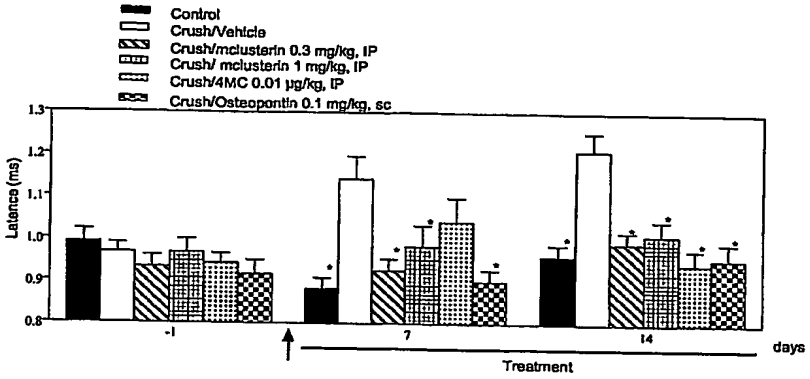

Control
Crush/Vehicle
Crush/mclusterin 0.3 mg/kg, IP
Crush/ mclusterin 1 mg/kg, IP
Crush/4MC 0.01 µg/kg, IP
Crush/Osteopontin 0.1 mg/kg, sc
Latence (ms)
1.3
1.2
1.1
1.0
0.9
0.8
-1
7
14
days
Treatment

Fig. 4

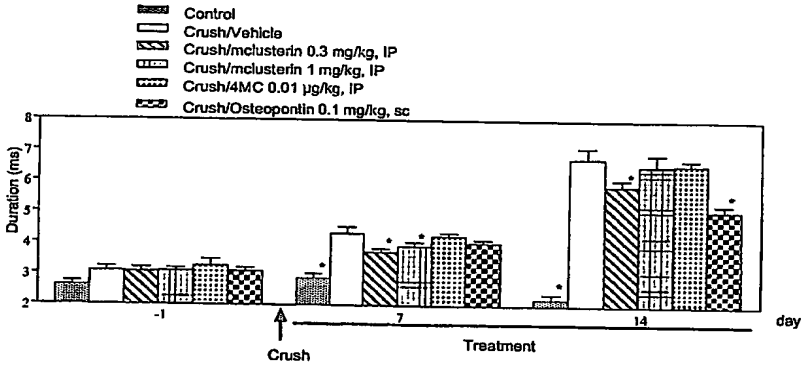

Control
Crush/Vehicle
Crush/mclusterin 0.3 mg/kg, IP
Crush/mclusterin 1 mg/kg, IP
Crush/4MC 0.01 µg/kg, IP
Crush/Osteopontin 0.1 mg/kg, sc
Duration (ms)
8
7
6
5
4
3
2
-1
7
14
day
Crush
Treatment

Fig. 5

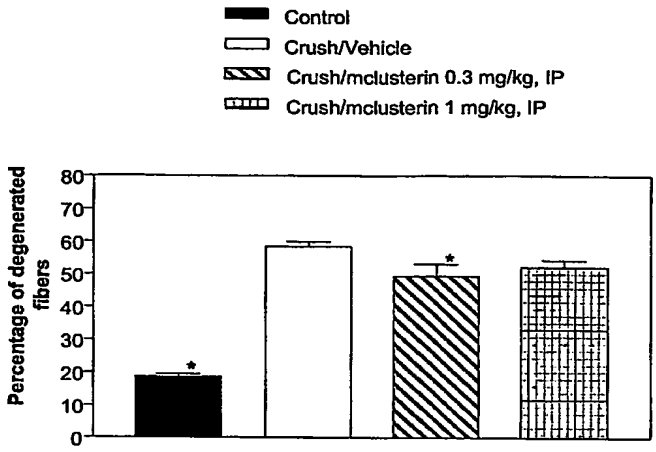

Control
Crush/Vehicle
Crush/mclusterin 0.3 mg/kg, IP
Crush/mclusterin 1 mg/kg, IP
Percentage of degenerated fibers
80
70
60
50
40
30
20
10
0
*
*

Fig. 6

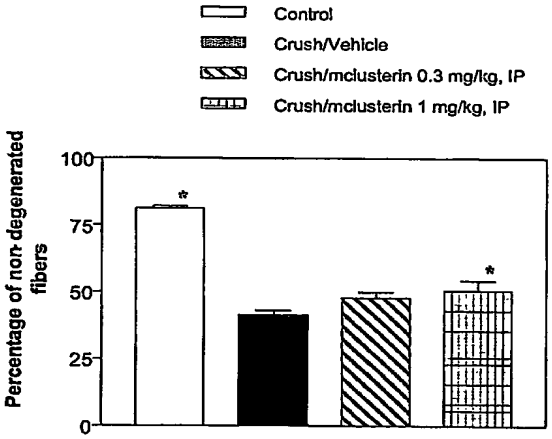

Control
Crush/Vehicle
Crush/mclusterin 0.3 mg/kg, IP
Crush/mclusterin 1 mg/kg, IP
Percentage of non degenerated fibers
100
75
50
25
0
*
*

Fig. 7

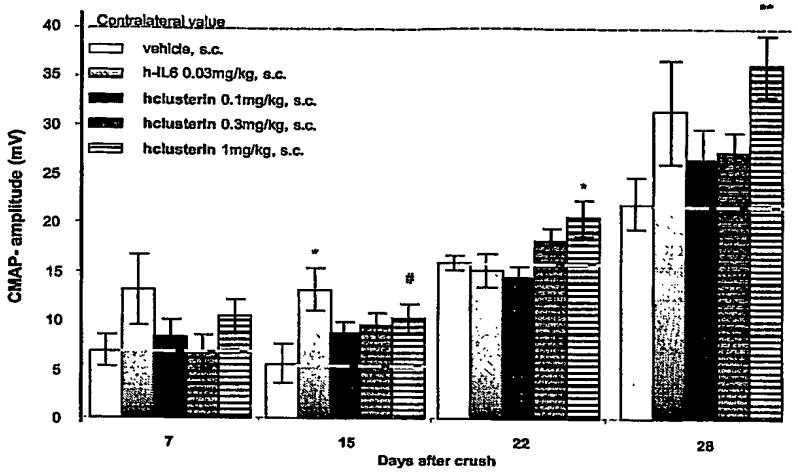

Contralateral value
vehicle, s.c.
h-IL6 0.03mg/kg, s.c.
hclusterin 0.1mg/kg, s.c.
hclusterin 0.3mg/kg, s.c.
hclusterin 1mg/kg, s.c.
CMAP- amplitude (mV)
0
5
10
15
20
25
30
35
40
7
15
22
28
Days after crush

Fig. 8

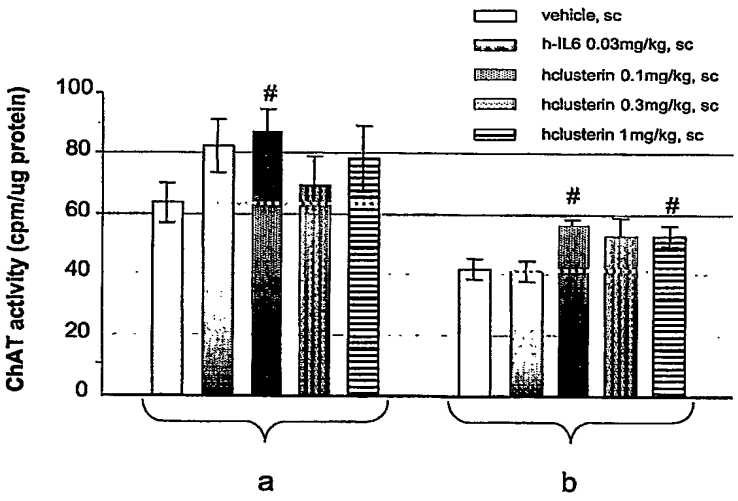

vehicle, sc
h-IL6 0.03mg/kg, sc
hclusterin 0.1mg/kg, sc
hclusterin 0.3mg/kg, sc
hclusterin 1mg/kg, sc
ChAT activity (cpm/ug protein)
0
20
40
60
80
100
a
b

Fig. 9

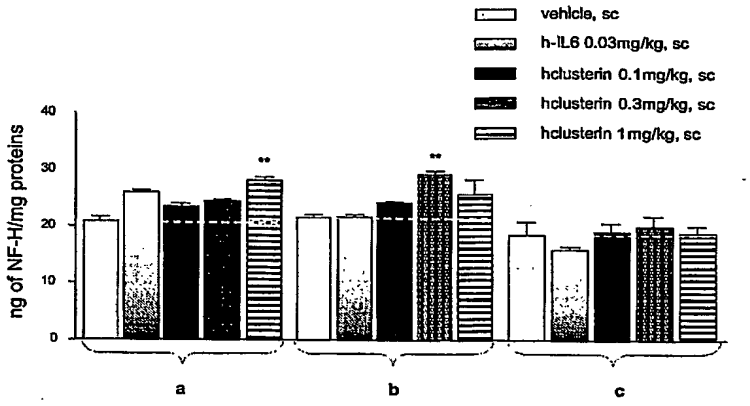

vehicle, sc
h-IL6 0.03mg/kg, sc
hclusterin 0.1mg/kg, sc
hclusterin 0.3mg/kg, sc
hclusterin 1mg/kg, sc
ng of NF-H/mg proteins
40
30
20
10
0
**
**
a
b
c

Fig. 10

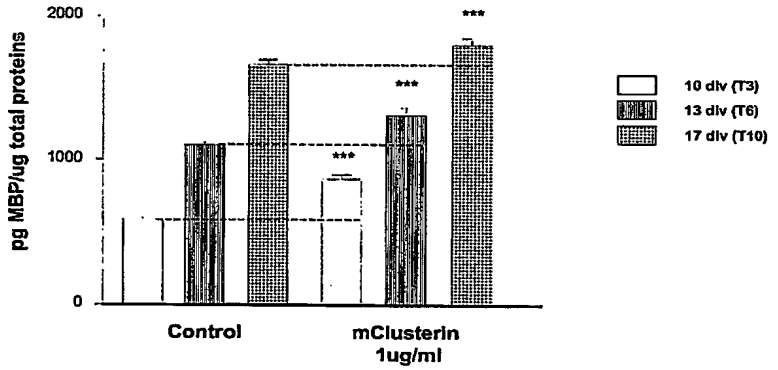

pg MBP/ug total proteins
2000
1000
0
***
***
***
10 div (T3)
13 div (T6)
17 div (T10)
Control
mClusterin
1ug/ml

Fig. 11

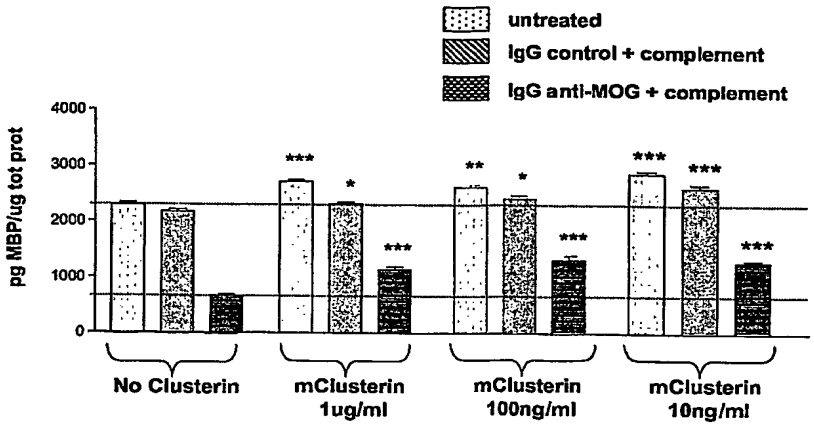


Fig. 12

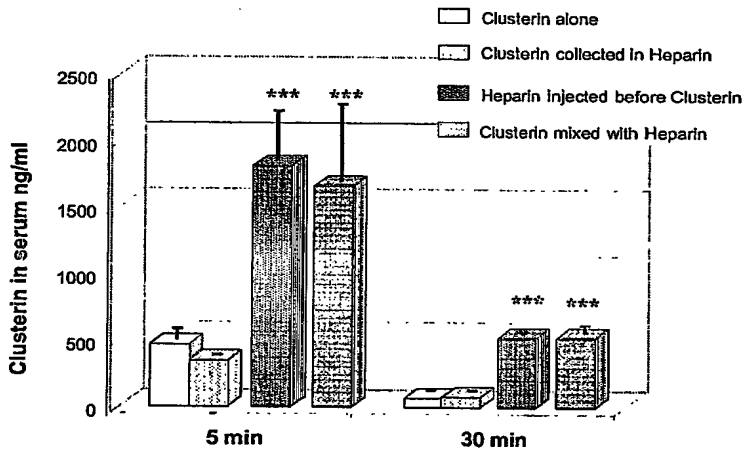


Fig. 13.A

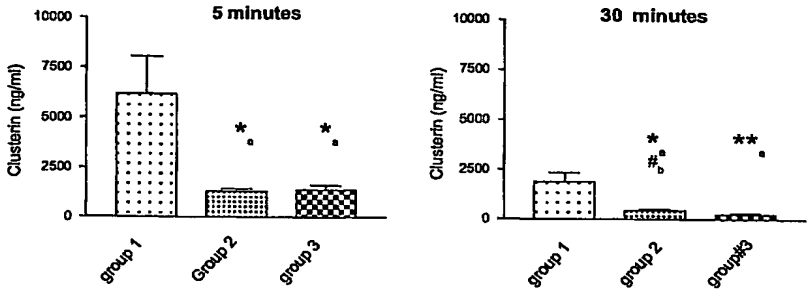

5 minutes
30 minutes
Clusterin (ng/ml)
10000
7500
5000
2500
0
group 1
Group 2
group 3
group#3

Fig. 13.B